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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/680,286	10/06/2000	Eric Paton		8985
24117 75	590 07/15/2002			
ERIC PATON	1		EXAM	INER
498 RIO GRAN MORGAN HIL			NOLAND,	THOMAS
			ART UNIT	PAPER NUMBER
			2856	
			DATE MAILED: 07/15/2002	2

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	Examinar No	
—The MAILING DATE of this communicati napp	pears on the cover sheet	beneath the correspondence address—
eriod for Reply	.3	THE MAN THE MAN INC DATE
SHORTENED STATUTORY PERIOD FOR REPLY IS SE OF THIS COMMUNICATION.		MONTH(S) FROM THE MAILING DATE
<ul> <li>Extensions of time may be available under the provisions of 37 C from the mailing date of this communication.</li> <li>If the period for reply specified above is less than thirty (30) days</li> <li>If NO period for reply is specified above, such period shall, by de</li> <li>Failure to reply within the set or extended period for reply will, by</li> </ul>	, a reply within the statutory mir	imum of thirty (30) days will be considered timely.
Status		
Responsive to communication(s) filed on 6	4, 6, 233,	
This setion is FINAL		
<ul> <li>Inis action is Pivac.</li> <li>Since this application is in condition for allowance exaccordance with the practice under Ex parte Quayle,</li> </ul>	cept for formal matters, <b>pr</b> 1935 C.D. 1 1; 453 O.G. 2	eria.
Disp sition of Claims		the in the employees
Claim(s)		is/are pending in the application.
<b>O</b> ( <b>a</b> ) <b>O O O O O O O O O O</b>		
☐ Claim(s)		is/are allowed.
Claim(s) 1-7 6-10 9-	[	is/are rejected.
		is/are objected to.
Claim(s)		
Claim(s)		are subject to restriction or election requirement.
Claim(s)  Claim(s)  Application Papers		are subject to restriction or election
Claim(s)  Claim(s)  Application Papers  See the attached Notice of Draftsperson's Patent December 1997	rawing Review, PTO-948.	are subject to restriction or election requirement.
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U. S. Patent and Trademark Office PTO-326 (Rev. 9-97) Part of Paper No.

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1. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

It does not identify the city and either state or foreign country of residence of each inventor. The residence information may be provided on either on an application data sheet or supplemental oath or declaration.

It does not identify the mailing or post office address of each inventor. A mailing or post office address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The mailing or post office address should include the ZIP Code designation. The mailing or post office address may be provided in an application data sheet or a supplemental oath or declaration. See 37 CFR 1.63(c) and 37 CFR 1.76.

Note the city of residence is believed to be Morgan Hill, not 498 Rio Grande. Applicant is also reminded of the full given name requirement in the event a middle initial was omitted.

2. The disclosure is objected to because of the following informalities: The initial page 1 should be canceled and if desired the referred to patents described in the background art section on page 1 of the specification.

Appropriate correction is required.

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3. The drawings are objected to because Fig 1 should be legended -- Prior Art--. Fig 4 should be redrawn to illustrate 22 as a box element legended -- Wireless Receiving Module--, elements 13 and 14 shown as distinct elements and element 20 shown as a conventional representation of a battery or as a box labeled --battery--.

4. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

- 5. Claim 8 is objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim should refer to other claims in the alternative only. See MPEP § 608.01(n). Accordingly, the claim has not been further treated on the merits.
- 6. The following is a quotation of the second paragraph of 35 U.S.C. 112: The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 7. Claims 1-7 and 9-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

It is unclear what is being claimed in claim 1 since directed to an apparatus but no specific apparatus limitations are set forth. Claims 2, 4, 6-7, 9-14 and 17 are unclear because they appear to be claiming only a portion of the apparatus of their base claim instead of the entire apparatus as required. It is unclear what further apparatus limitations are being claimed by claims 2, 10 and 17.

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Claim 2 is also unclear because it is unclear if all the parameters are being claimed to be measured or only one from the group. The use of a Markush type claim is suggested. The limitation "other more advanced chemical/material analysis techniques as described in the prior art" is clearly not specific. It is unclear what is meant by "capital goods" in claims 3 and 5. I.e. how do they differ from noncapital goods? There is no proper antecedent for "said capital goods, sensors, and recording device" in claim 5, line 1; claim 15, line 1; and claim 16, line 1. In claim 5, line 2 "the surface" lacks proper antecedent. Claim 6, 15 and 16 are unclear because no means for doing the alternatives is set forth. If two different means with no alternative selection two different claims should be used. It is unclear what is meant by efficient and elevated in claim 7. Use of such and such as limitations, as in lines 2-3 therein make unclear whether a general or the particular device are being claimed. It is unclear how the "external hostile environment" as in claim 9 can be an apparatus limitation. It is unclear what is meant by "special" in line 2. There is no proper antecedent for "said environmental substance" in claim 11, line 1. It is unclear what is meant by "extreme". There is no proper antecedent for "the environment" in claim 12. Qualifier limitations such as "when" as in claims 11 and 14 are clearly not specific. Similarly "especially" as in claim 14, line 1 is not specific. Limitations such as "and/or" as in the last line of claims 15 and 16 are clearly not specific. In claim 15, line 4 "said" should be detected. In claim 16, line 5 "said" should be --a hard--. Use of "such as" limitations as in claim 17 and parenthetical limitations as in claim 17 leads to vagueness as to the extent of what is actually being claimed.

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8. Claims 7, 12, 15-16 are objected to because of the following informalities: Claims 7 and 15-16 should each be written in single sentence format. In claim 12, line 1 "chose" should be -- chosen--. In line 3 of claims 15 and 16 "the" should be deleted. Appropriate correction is required.

- 9. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the A to D converters, signal conditioning devices and data saving means of claim 4, solid state memory of claim 6 and isolating material of claim 9 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.
- 10. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.

- 11. The specification must be amended if necessary to describe any proposed drawing correction.
- 12. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The particular solid state memories of claim 13 do not appear to be set forth on page 9, lines 1-3 or elsewhere in the specification. The hermetic sealing of claim 15 does not appear to be set forth on page 9, lines 12-15 or elsewhere in the specification. The radiation

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isolation material of claim 16 likewise is not set forth on page 9 or elsewhere. Extreme heat in excess of 100°C monitoring of claim 11 likewise does not appear to be set forth.

13. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 14. Claims 1-2 and 15-17 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Moslehi US 5,270,222.
- 15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 16. Claims 3-7 and 9-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Moslehi in view of (Renken et al US 5,967,661 cited by applicant or Melcher US 5,015,951). Moslehi does not disclose attaching sensors, recording device and energy source to a surface of the capital good (semiconductor wafer) being monitored. However it is well known to incorporate such features into semiconductors and thus they obviously could have been in the system of Moslehi especially in view of the teaching of incorporation of sensors or sensing structure on material in either Renken et al (note especially Fig. 9) and Melcher. Such would obviously ease measuring. The various electronic components and memory systems, etc. appear to be all well known of general utility and could thus obviously have been incorporated thereinto. Isolation from external hostile environments is a known expedient to protect the equipment and

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get more accurate measurements. One of ordinary skill would have been able to monitor in liquid environments since techniques for monitoring such environments appear to be well known.

- 17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references show measuring during manufacturing, and/or were cited by applicant.
- 18. Seidel at al US 2002/0073386 Al, not prior art discloses a semiconductor die manufacture method using noninvasive measuring but not claim an apparatuses as herein.
- 19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tom Noland whose telephone number is (703) 305-4765. The examiner can normally be reached on weekdays from 9:00 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Hezron E. Williams, can be reached on (703) 305-4705.

The fax phone number for the organization where this application or proceeding is assigned is (703) 308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Thomas P. Noland Primary Examiner Art Unit 2856

Lon Ned

Noland/EK 07/11/02